Claims:

1. A method of drilling and completing a subsea well, comprising:

(a) connecting a drilling riser to a wellhead housing and landing the wellhead housing in a supporting wellhead that has an external orientation member previously installed in a desired orientation;

(b) drilling and casing a well through the wellhead housing;

(c) disconnecting the drilling riser from the wellhead housing after casing has been installed;

(d) landing a BOP orientation spool on the wellhead housing, the BOP orientation spool having an external orientation member that registers it to the external orientation member on the supporting wellhead, the BOP orientation spool having an internal orientation member;

(e) connecting the drilling riser to the BOP orientation spool; and

(f) providing a tubing hanger with an orientation member, connecting the tubing hanger to a string of tubing and running the tubing hanger through the drilling riser and BOP orientation spool and orienting the tubing hanger via the internal orientation member in the BOP orientation spool; (g) providing a production tree with an orientation member on a lower end; and

(h) removing the BOP orientation spool from the wellhead housing, lowering the production tree onto the wellhead housing, and engaging the orientation member of the production tree with the orientation member of the tubing hanger to rotate the tree to a desired orientation.

2. The method according to claim 1, wherein the tree is lowered onto the wellhead with a lift line.

3. The method according to claim 1, further comprising:

connecting the tree via a flowline jumper to additional subsea equipment, the flowline jumper having a portion with a curved configuration, the buoyancy causing the curved configuration portion to float in a vertical plane after installation.

4. A method of drilling and completing a subsea well, comprising:

(a)providing an outer wellhead housing with an external locator member and installing the outer wellhead housing at an upper end of a well and with the locator member in a desired orientation;

(b)landing an inner wellhead housing in the outer wellhead housing;

(c) drilling and casing the well through the inner wellhead housing;

(d) then, if desired, re-orienting the locator member on the outer wellhead housing;

(e) providing a BOP orientation spool that has an external orientation member and an internal orientation member;

(f)lowering the BOP orientation spool onto the inner wellhead housing and engaging the external orientation member with the locator member to rotate and orient the BOP orientation spool; then

(g)connecting a drilling riser to the BOP orientation spool;

(h)providing a tubing hanger with an orientation member on its upper end, running the tubing hanger through the BOP orientation spool, the internal orientation member causing the tubing hanger to rotate and orient as the tubing hanger lands in the wellhead housing; then

(i) disconnecting the BOP orientation spool and the drilling riser from the inner wellhead housing; and

(j) providing a production tree with an orientation member on a lower end, lowering the production tree onto the inner wellhead housing, and engaging the orientation member of the production tree with the orientation member of the tubing hanger to rotate the tree to a desired orientation.

5. The method according to claim 4, further comprising:

mounting a flowline connector support to the outer wellhead housing, the support orienting in a desired orientation in step (a);

mounting a flowline connector on the tree, which is oriented in alignment with the support in step (j);

landing a flowline jumper on the support; and

subsequently connecting the flowline connector to the flowline jumper after step (j).

6. The method according to claim 4, wherein step (c) is performed through the drilling riser, and the method further comprises disconnecting the drilling riser before installing the BOP orientation spool.

7. A subsea well assembly, comprising:

a wellhead housing;

a BOP orientation spool mounted on the wellhead housing in a desired orientation, the BOP orientation spool having an internal orientation member;

a tubing hanger landed in the wellhead housing, the tubing hanger being oriented in a desired orientation by the internal orientation member of the BOP orientation spool while landing;

an orientation member connected to an upper end of the tubing hanger; and

a tree having an orientation member on a lower end that engages the orientation member of the tubing hanger while the tree is landing on the wellhead housing, causing the tree to rotate to a desired orientation.

8. The assembly according to claim 7, wherein the orientation members comprise mating sleeves having matching helical or tapered contours.

9. The assembly according to claim 7, further comprising a flowline connector mounted to the tree for rotating with the tree to the desired orientation.

10. A subsea well assembly, comprising:

a low pressure wellhead housing at an upper end of a well;

a locator member and a flowline support mounted to the low pressure wellhead housing;

a high pressure wellhead housing landed in the low pressure wellhead housing;

a BOP orientation spool that mounts on an upper end of the high pressure wellhead housing;

an external orientation member and an internal orientation member on the BOP orientation spool, the external orientation member engaging the locator member to register orientation of the BOP orientation spool while the BOP orientation spool lands on the high pressure wellhead housing;

a tubing hanger having an orientation member on its upper end;

a tubing hanger running tool connected to the tubing hanger, the tubing hanger running tool engaging the internal orientation member of the BOP orientation spool to cause the tubing hanger to rotate and orient while landing in the high pressure wellhead housing; and a production tree having a flowline connector and an orientation member on a lower end for engaging the orientation member of the tubing hanger to rotate the tree and the flowline connector to a desired orientation in alignment with the flowline support.

11. The subsea well assembly according to claim 10, further comprising:

a ring mounted to the low pressure wellhead housing to which the locator member and the flowline support are mounted enabling selective rotation of the locator member and flowline support relative to the low pressure wellhead housing.